IN THE SPECIFICATION:

Please replace the "Brief Description of the Drawings" section beginning in line 3 on page 8 with the following amended section:

Brief Description of the Drawings

Fig. 1 is a flow diagram showing a first embodiment of a peritoneal dialyzer according to the present invention. Fig. 2 is a flow diagram showing a second embodiment of the peritoneal dialyzer according to the present invention. Figs. 3-5 show embodiments of a peritoneal dialyzer according to the present invention using different mechanisms for dehydrating the peritoneal dialysate.

Please replace the paragraph beginning on page 13, line 3 from the bottom of the page, with the following amended paragraph:

As an example of such a dehydrating mechanism 6, there is shown in Fig. 3 a mechanism which performs dehydration by providing pumps in a hemodialysate inflow channel to the dialyzer 3 and a hemodialysate outflow channel from the dialyzer 3 respectively, and by driving the same so that a flux in the pump on the outflow channel side is larger than a flux in the pump on the inflow channel side.

Please replace the paragraph beginning on page 14, line 5, with the following amended paragraph:

As another dehydrating mechanism 6, there is shown in Fig. 4 a mechanism which performs dehydration by arranging a pump which can equalize the flux of hemodialysate inflowing into the dialyzer 3 and the flux of hemodialysate outflowing from the dialyzer 3, for example, a balance chamber or a dual pump, in the hemodialysate circuit 4; providing a branch channel on the hemodialysate outflow channel at a position closer to the dialyzer 3 than the pump; and driving a dehydrating pump provided in the branch channel so that the amount of hemodialysate outflowing from the dialyzer 3 becomes larger than the amount of hemodialysate inflowing into the dialyzer 3.

Please replace the paragraph beginning on page 14, line 8 from the bottom of the page, with the following amended paragraph:

As still another dehydrating mechanism 6, there is shown in Fig. 5 a mechanism (Japanese Patent Publication No. 3-54591 1692872) in which a viscous pump which can vary the capacities of a chamber on the side of the hemodialysate inflow channel and a chamber on the side of the hemodialysate outflow channel

according to the movement of a diaphragm is provided, and dehydration is performed by varying the capacities so that the capacity of the chamber on the side of the inflow channel is smaller than the capacity of the chamber on the side of the outflow channel and the amount of hemodialysate outflowing from the dialyzer 3 is larger than the amount of hemodialysate inflowing into the dialyzer 3.